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| 10/781,325   | 02/17/2004  | Jussi Piispanen      | 944-001.070-2       | 9454             |
| 10/945 7590 04/06/2011<br>NOKIA CORPORATION<br>c/o Ware, Fressola, Van Der Stuys & Adolphson LLP<br>Building Five, Bradford Green<br>755 Main Street, PO Box 224<br>Monroe, CT 06468 |             |                      |                     |                  |
|  |             |                      | EXAMINER            |                  |
|  |             |                      | LIN, KENNY S        |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 2478                |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/781,325

**Applicant(s)**

PIISPANEN ET AL.

**Examiner**

Kenny S. Lin

**Art Unit**

2478

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 2/28/2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 31-66 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 31-66 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 8/30/2010
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 31-66 are presented for examination.
2. The IDS submitted on 8/30/2010 is considered.

**Claim Rejections - 35 USC § 103**

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 31-35, 37-39, 41-43, 45-50, 52-54, 56-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant Admitted Prior Art (AAPA) disclosed in pages 1-10 of the instant specification, in view of Rabbers et al (Rabbers), US 2007/0016695.
5. As per claim 31, AAPA taught the invention including a method comprising:
  - a. Establishing a transport connection, between a first synchronization agent associated with a first data store in a first device and a second synchronization agent associated with a second data store in a second device (page 2, lines 21-29, page 9, lines 31-33, page 10, lines 1-7);
  - b. Preparing a message comprising a command for synchronizing said second data store (page 6, lines 14-24), said command comprising at least one data

identification element, embedded in said command, identifying a folder associated with at least one modification in the first data store (page 1, lines 24-31, page 2, lines 1-29, page 7, lines 8-17, page 9, lines 21-24); and

- c. Communicating said message to said second synchronization agent via the established transport connection (page 1, lines 24-31, page 2, lines 1-29),
  - d. Wherein the at least one data identification element, embedded in said command, is contained in at least one non-data element of the message (page 7, lines 12-17).
6. AAPA does not teach the message to comprise a command with respect to change in the directory structure of said first data store or identifying a folder associated with at least one modification in the directory structure of the first data store. Rabbers taught to use message with IDs to determine changes in the directory structure and to synchronize the directory structure when determined the directory structure has changed (pp. 0006, 0052, 0130-133, 0150). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of AAPA and Rabbers because Rabber's teaching of determining directory structure change using IDs would allow AAPA's system to know whether to perform delta extract or full extract for synchronization.

7. As per claim 38, AAPA taught the invention including a method comprising:
- a. Establishing a transport connection between a first synchronization agent associated with a first data store and a second synchronization agent associated

with a second data store (page 2, lines 21-29, page 9, lines 31-33, page 10, lines 1-7);

- b. Receiving a synchronization message, at said second synchronization agent via said transport connection, comprising a command for synchronizing said second data store (page 6, lines 14-24) with respect to directory structure of said first data store (page 1, lines 24-31, page 2, lines 1-29, page 7, lines 8-12: identify folders), said command comprises at least one data identification element, embedded in said command, identifying a folder associated with at least one modification in the first data store (page 7, lines 8-17, page 9, lines 21-24); and
  - c. Making changes to the directory structure of the second data store based on the information conveyed by said command included in the message and the at least one data identification element embedded in said command (page 1, lines 17-31, page 2, lines 1-29, page 9, lines 21-24),
  - d. Wherein the at least one data identification element, embedded in said command, is contained in a non-data element of the message (page 7, lines 12-17).
8. AAPA does not teach the message to comprise a command with respect to change in the directory structure of said first data store or identifying a folder associated with at least one modification in the directory structure of the first data store. Rabbers taught to use message with IDs to determine changes in the directory structure and to synchronize the directory structure when determined the directory structure has changed (pp. 0006, 0052, 0130-133, 0150). It would have been obvious to one of ordinary skill in the art at the time the invention was made to

combine the teachings of AAPA and Rabbers because Rabber's teaching of determining directory structure change using IDs would allow AAPA's system to know whether to perform delta extract or full extract for synchronization.

9. As per claim 46, AAPA taught the invention including a device, comprising:
- a. A data store configured to store data as data items in folders, the folders defining a directory structure (page 1, lines 24-31, page 4, lines 15-30), and
  - b. A synchronization agent configured to synchronize said data store with another data store of another device (page 1, lines 24-31, page 2, lines 21-29);
  - c. Wherein the synchronization agent being further configured to cause the device to perform at least the following:
    - i. Establishing a transport connection between said synchronization agent and another synchronization agent, of said another device, associated with said another data store (page 2, lines 21-29, page 9, lines 31-33, page 10, lines 1-7);
    - ii. Receive a synchronization message, via said transport connection, comprising a command for synchronizing said data store (page 6, lines 14-24) with respect to directory structure (page 1, lines 24-31, page 2, lines 1-29, page 7, lines 8-12: identify folders), said command comprises at least one data identification element, embedded in said command, identifying a folder associated with at least one modification in said another data store (page 7, lines 8-17, page 9, lines 21-24); and

- iii. Make changes to the directory structure of said data store based at least in part on the information conveyed by said command included in the message and the at least one data identification element embedded in said command (page 1, lines 17-31, page 2, lines 1-29, page 9, lines 21-24),
- iv. Wherein the at least one data identification element, embedded in said command, is contained in a non-data element of the message (page 7, lines 12-17).

10. AAPA does not teach the message to comprise a command with respect to change in the directory structure of said another data store or identifying a folder associated with at least one modification in the directory structure of said another data store. Rabbers taught to use message with IDs to determine changes in the directory structure and to synchronize the directory structure when determined the directory structure has changed (pp. 0006, 0052, 0130-133, 0150). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of AAPA and Rabbers because Rabber's teaching of determining directory structure change using IDs would allow AAPA's system to know whether to perform delta extract or full extract for synchronization.

11. As per claim 57, AAPA taught the invention including a device, comprising:
- a. A data store configured to store data as data items in folders, the folders defining a directory structure (page 1, lines 24-31, page 4, lines 15-30), and

- b. A synchronization agent configured to synchronize said data store with another data store of another device (page 1, lines 24-31, page 2, lines 21-29);
- c. Wherein the synchronization agent being further configured to cause the device to perform at least the following:
  - i. Establishing a transport connection between said synchronization agent and another synchronization agent, of said another device, associated with said another data store (page 2, lines 21-29, page 9, lines 31-33, page 10, lines 1-7);
  - ii. Preparing a synchronization message comprising a command for synchronizing said another data store (page 6, lines 14-24) with respect to a directory structure (page 1, lines 24-31, page 2, lines 1-29, page 7, lines 8-12: identify folders), said command comprising at least one data identification element, embedded in said command, identifying a folder associated with at least one modification in said data store (page 7, lines 8-17, page 9, lines 21-24); and
  - iii. Communicating said synchronization message to said another synchronization agent via said transport connection (page 1, lines 24-31, page 2, lines 1-29),
  - iv. Wherein the at least one data identification element, embedded in said command, is contained in at least one non-data element of the message (page 7, lines 12-17).



12. AAPA does not teach the message to comprise a command with respect to change in the directory structure of said data store or identifying a folder associated with at least one modification in the directory structure of the data store. Rabbers taught to use message with IDs to determine changes in the directory structure and to synchronize the directory structure when determined the directory structure has changed (pp. 0006, 0052, 0130-133, 0150). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of AAPA and Rabbers because Rabber's teaching of determining directory structure change using IDs would allow AAPA's system to know whether to perform delta extract or full extract for synchronization.

13. As per claims 32, 39, 47-48 and 58-59, AAPA further taught that wherein the command and the at least one data identification element comprise information about said at least one modification associated with said folder and wherein the message further comprises at least one data element comprising information about a change in data items in the first data store (page 1, lines 27-31, page 2, lines 1-9, page 7, lines 7-34, page 8, lines 1-34, page 9, lines 1-7).

14. As per claims 33, 41, 52 and 62, AAPA further taught that wherein the at least one data identification element, embedded in said command or operational element, comprises at least one of a target element and a source element (page 7, lines 8-17).

15. As per claims 34, 42, 53 and 63, AAPA further taught that wherein the message is a syncML message and said command is a syncML protocol command element (page 6, lines 12-24, page 9, lines 12-16).

16. As per claims 35, 43, 54 and 64, AAPA further taught that wherein the data identification element comprises a LocURI element (page 7, lines 8-17).

17. As per claims 37, 45, 56 and 66, AAPA further taught that wherein the at least one data identification element, embedded in said command, comprises an identification and a path of said folder (page 7, lines 8-17).

18. As per claims 49 and 60, AAPA further taught that wherein the device comprises one of a wireless communication terminal and a wireline communication terminal (page 1, lines 17-24, page 2, lines 10-29).

19. As per claim 50, AAPA further taught that wherein the device is operative as a server in a client server model and comprises a sync engine configured to resolve conflicts posed by the message (page 1, lines 17-31, page 2, lines 1-9).

20. As per claim 61, AAPA further taught that wherein the device is operative as a client (page 1, lines 17-24, page 2, lines 30-33).

21. Claims 36, 40, 44, 51, 55 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Rabbers as applied to claims 33-35, 37-39, 41-43, 45-50, 52-54, 56-64 and 66 above, and further in view of Edwards, US 7,395,281.

22. As per claims 36, 44, 55 and 65, AAPA and Rabbers taught the invention as claimed in claims 31, 38, 46 and 57. AAPA and Rabbers did not specifically teach that wherein said command relates to a folder manipulation operation comprising one or more of renaming a folder, creating a new folder, moving a folder and moving a data item from one folder to another folder. Edwards taught to use recorded tree structures to determine the changes of the items (both data file and folder) and to synchronize the data files and folders including adding, deleting a folder and moving a data item from one folder to another folder (col.3, lines 35-67, col.4, lines 38-67, col.5, lines 1-7). Edwards further taught that the recorded tree structure can be sent on a transportable medium to the second location for comparison (col.2, lines 10-16). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of AAPA and Edwards and include Edwards' tree structure in the command message for sending it to the second data store for comparing the changes made to the files and the folder structures in order to synchronize the data files and folder structures with the latest recorded tree structure of items..

23. As per claim 40 and 51, AAPA and Rabbers taught the invention as claimed in claims 38 and 46. AAPA and Rabbers did not specifically teach to further comprise extracting, by said synchronization agent, information about said change in the directory structure from the

command and the at least one data identification element and providing the information to either a synchronization engine or to an application entity. Edwards taught to send recorded tree structures to the second data store for comparison by a Synchronizer to determine the changes of the items (both data file and folder) and to synchronize the data files and folders including adding, deleting a folder and moving a data item from one folder to another folder (col.2, lines 10-16, col.3, lines 35-67, col.4, lines 38-67, col.5, lines 1-7). In Edwards' teaching, the Synchronizer includes the functionalities of a synchronization agent and a synchronization engine (page 4, lines 38-64). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of AAPA and Edwards and include Edwards' tree structure in the command message for sending it to a Synchronizer of a second data store for comparing the changes made to the files and the folder structures in order to synchronize the data files and folder structures with the latest recorded tree structure of items.

### **Response to Arguments**

24. Applicant's arguments with respect to claims 31-66 have been considered but are moot in view of the new ground(s) of rejection.

### **Conclusion**

25. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenny Lin whose telephone number is (571) 272-3968.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffery Pwu can be reached on (571) 272-678. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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/Kenny S Lin/

Primary Examiner, Art Unit 2452

April 5, 2011